Jones Beach State Parkway Channel Bascule
Bridge LP-2
(Loop State Parkway Bridge)
Loop State Parkway (Route 908C), spanning
Long Creek
Hempstead
Nassau County
New York

HAER No. NY-177

PHOTOGRAPHS
WRITTEN HISTORICAL DATA

Historic American Engineering Record
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HISTORIC AMERICAN ENGINEERING RECORD

JONES BEACH STATE PARKWAY CHANNEL BASCULE BRIDGE LP-2
(LOOP STATE PARKWAY BRIDGE)
HAER No. NY-177

Location: Loop State Parkway (Route 908C) spanning Long Creek southeast of Middle Bay, City of Hempstead, Nassau County, New York. Bridge is 6,200 feet west of interchange M-10 with the Meadowbrook State Parkway and north of Jones Inlet.

UTM: N 4495600
E 621010
New York State Quad: Jones Inlet

Date of Construction: Plans prepared in 1933 and bridge constructed in 1934.

Style: The Loop Parkway bridge LP-2 is a double leaf, trunnion bascule bridge with eighteen concrete continuous tee beam approach spans.

Engineer/ Builder: Bridge built for the Jones Beach State Parkway Authority, under contract number 7. Plans prepared under the authority of A. E. Howland, Chief Engineer and W. Earle Andrews, Deputy Chief Engineer. Shortridge and Hardesty, New York, N.Y., listed as consulting engineers.

Present Owner: Long Island State Parks and Recreation Commission.

Present Use: Bridge carried an average of 19,481 vehicles per day during 1985.

Significance: One of the original Loop State Parkway bridges.

Materials of Construction: Piles, 50 feet long, 15 inches in diameter, and spaced three feet apart, support the reinforced concrete pier foundations and concrete bent piers. Each approach span has four interior tee beams and two false arch fascia girders carrying a reinforced concrete slab deck.

Dimensions: The double leaf bascule span is 76 feet 6 inches long. On each side of the bascule span are nine concrete continuous tee beam approach spans, each 32 feet long. The approach span closest to the bascule leaf is built over the bascule leaf counterweight system and has floor beams and girders that are arranged differently from the other approach spans. The entire bridge is 680 feet long between abutments with a deck area of 36,700 square feet. The bridge has an out-to-out width of 54 feet and a curb-to-curb width of 44

feet. On both sides of the bridge is a 2 foot 8 inch wide sidewalk. The bascule span has a 75 foot horizontal clearance between the fenders of the piers and a vertical clearance to navigation between 21 and 26 feet when closed. From both ends, the approach spans rise on a 2.20 percent grade toward the bascule span.

The bascule lift mechanism is a segmental gear with a radius of 7 feet 6 inches. The trunnion shaft has a diameter of 22.5 inches. Each bascule leaf has two main girders 59 feet 6 inches long. Approximately 40 feet 6 inches of the main girder support the stringers and deck. The remaining 19 feet are recessed below the adjacent approach span and form the counterweight system. Four bascule leaf floor beams are formed from riveted plate girders, 36 inches high and spaced 13 feet and 2.5 inches apart center-to-center. Stringers are 15-inch rolled steel I beams. The sidewalk floor beams are attached to the girders by 18 inch high brackets. The bascule span permits a 26 foot vertical and 75 foot horizontal clearance for navigation.

Significant Exterior Features: A tower is located at each corner of the double leaf bascule span. The three unoccupied machinery towers are 10 feet square and the single control room and observation tower is 11 feet square. The towers, rising up approximately four stories above the water level, have an unadorned stone facade and a band of windows at the top of the operator's tower.

Major Alterations and Additions: Between 1969 and 1972, under contract LISP 69-2, the road surface, guard rails, and electrical systems were either repaired or replaced. Also, some structural steel was replaced and rip-rap was placed at the base of the bascule span piers.

Additional Information: The Loop State Parkway bridge across Long Creek was constructed in 1934 for the Jones Beach State Parkway Authority. The bridge was built under contract number 7 as part of the 2.8 mile long Loop State Parkway.

Project
Information:

The documentation of the Jones Beach State Parkway Channel Bascule Bridge LP-2 was prepared by the Historic American Engineering Record (HAER), National Park Service, during the summer of 1987 for the New York State Historic Bridges Recording Project. This project was sponsored by the New York State Department of Transportation and under the supervision of Eric DeLony, Chief & Principle Architect, HAER. This report was written by Andrew Cole and Charles Scott. When citing this report, please credit the Historic American Engineering Record and the authors.

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Jones Beach State Parkway Channel Bascule Bridges, Loop Parkway, Contract Number 7 Drawings, New York Department of Transportation, Region 10, Hauppauge, New York.

New York State Department of Transportation, Bridge Identification Number 1056769 File, Region 10, Hauppauge, New York.